University of Toronto Scarborough
Department of Physical and Environmental Sciences
Knowledge, Ethics and Environmental Decision-Making ESTC36H3
Monday 1-4 pm BV260

Instructor: Dr. Nicole Klenk, nicole.klenk@utoronto.ca
TA: Off, Office hours: Wednesday 10am – 12 pm
Zoom link: 
Meeting ID: 
Passcode: 

Course Description
Most environmental issues have many dimensions including technical, social, cultural, ethical, political, and economic, and these issues may concern numerous parties that have different points of view, interests and rights. Using fair procedures, diverse knowledge systems and dialogical practices can go a long way towards achieving agreed-upon terms of reference for addressing environmental problems. Students will learn about relational approaches to addressing environmental problems, including participatory, deliberative and narrative processes. Many of these techniques seek broad societal consensus in decision-making on complex environmental issues. But sometimes conflicts around environmental issues are not amenable to consensus building and environmental problem solving must be structured to allow for the persistence of radically different values and knowledge systems. This course will provide a better understanding of the links between science, ethics and decision-making, but will also use case study analyses to support the development of necessary skills in addressing environmental problems in pluralistic and pragmatic way.

Course Objectives
Upon completion, students will
- Understand different theories of environmental knowledge, environmental ethics and environmental decision-making.
- Understand the difference and utility of aesthetic and efferent approaches to addressing environmental problems.
- Practice relational and dialogical approaches to reading environmental case studies.
- Demonstrate what they have learned through writing.

Required Textbooks
- Rachel Carson. 1962. Silent Spring. Available online through the University of Toronto library.
- Oswald, A. 2002. Dart. Faber and Faber. Available online through the University of Toronto library.
Course delivery and attendance
Because of the nature of the material covered in class, and the synchronous mode of delivery, class participation is highly recommended. Students are required to do readings before class and come prepared to discuss readings in class.

Grading Scheme

<table>
<thead>
<tr>
<th>Assessments</th>
<th>Percentage (%)</th>
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| Assignment 1
  Due October 17                    | 20             |
| Assignment 2
  Due November 14                   | 20             |
| Final Exam                          | 20             |
| Weekly responses to readings
  (For lectures 2-11; grade based on the best of 6/10 responses) | 40             |

Course policy on late assignments
No due dates will be extended unless discussed with and agreed upon by the TA. Penalty for late assignments will be 2% of the assignment mark per day late, including weekends. Late assignments will be accepted only for one week after the due dates. Assignments submitted later will not be reviewed and assessed.

Weekly responses to readings are due by 1 pm EST on Mondays (Lectures 2-11) and will be used for the class discussion. Responses to readings submitted after this deadline will not be reviewed and assessed.

The only exemption from these penalties will be for work that is late for health reasons, provided that students submit the proper documentation by way of the Absence Declaration Tool on ACORN.

A Note on Marking:
Feel free to contact me at any time to discuss the requirements of this course. If you are unhappy with the mark you received on an assignment, please email me and the TA with a written response to the comments on your assignment.

Handing in Your Assignment:
The assignments must be uploaded as Word documents on Quercus at the due date. Please follow the University of Toronto procedure to be completed in order to be considered for academic accommodation for any course work such as missed tests or late assignments.

Academic Integrity
The University treats cases of cheating and plagiarism very seriously. The University of Toronto’s Code of Behaviour on Academic Matters (http://www.governingcouncil.utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences in papers and assignments include using someone else’s ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment. On tests and exams cheating includes using or possessing unauthorized aids, looking at someone else’s answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University, including (but not limited to) doctor’s notes.

Please avoid academic dishonesty, have confidence in your own ability to learn and grow academically by doing your own thinking and writing!

Accessibility
Students with diverse learning styles and needs are welcome in this course! In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. I will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff (located in SW302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca

Communicating With You
The best way to communicate with me is during office hours. However, I also respond to student emails within two business days (Monday-Friday) and within business hours (9am-5pm). From time-to-time I will send email messages to the class to notify you of changes in schedule and opportunities that you may want to take advantage of. I can only send messages to your U of T e-mail address. If you use another account (gmail, hotmail, yahoo, etc.) make sure that your U of T email is sent to your alternate email account. Similarly if you want to communicate with me, please send the message from your U of T address as I will not respond to emails from other email accounts.
## Lecture schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Discussion prompt</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sept 12</td>
<td>Introduction</td>
<td>How do you know the environment?</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Sept 19</td>
<td>Environmental knowledge</td>
<td>Why is a reliance on propositional knowledge inadequate for environmental decision-making?</td>
<td>Dart 1-21; Ground Glass 9-20</td>
</tr>
<tr>
<td>3</td>
<td>Sept 26</td>
<td>Environmental ethics</td>
<td>What happens when you undermine people’s ethical systems in environmental decision-making?</td>
<td>Ground Glass p55-60</td>
</tr>
<tr>
<td>4</td>
<td>Oct 3</td>
<td>Environmental decision-making</td>
<td>What are the logics of consequentialism, appropriateness and meaningfulness in the context of environmental decision-making?</td>
<td>Chronicles 9 -39; Chemical Valley 81-91</td>
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<tr>
<td></td>
<td>Oct 10</td>
<td>Reading Week</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>Oct 17</td>
<td>“Reading” environmental problems</td>
<td>How does taking an aesthetic stance to “reading” environmental problems affect environmental decision-making?</td>
<td>Sunny Chernobyl 41-71</td>
</tr>
<tr>
<td>6</td>
<td>Oct 24</td>
<td>Relational practices</td>
<td>What does an authentic approach to environmental decision-making mean?</td>
<td>Chronicles 71-98</td>
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<tr>
<td></td>
<td></td>
<td>Assignment 1 due</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>Oct 31</td>
<td>Dialogical practices</td>
<td>What is the difference between authorizing and authoring environmental decisions?</td>
<td>Ground Glass 127-153</td>
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<tr>
<td>8</td>
<td>Nov 7</td>
<td>Metaphors we live by</td>
<td>Why is it important what metaphors we use to understand nature and to frame environmental problems and solutions?</td>
<td>Chemical Valley 93-117</td>
</tr>
<tr>
<td>9</td>
<td>Nov 14</td>
<td>ArtScience</td>
<td>What knowledge does art afford in environmental decision-making?</td>
<td>Dart 22-48</td>
</tr>
<tr>
<td>10</td>
<td>Nov 21</td>
<td>Tragedies in environmentalism</td>
<td>Why has tragedy been a dominant storyline in the environmental movement?</td>
<td>Sunny Chernobyl 1-39</td>
</tr>
<tr>
<td>11</td>
<td>Nov 28</td>
<td>Multispecies and ecological thinking perspectives</td>
<td>What are the implications of “making kin” with other species in environmental decision-making?</td>
<td>Chronicles 125-152</td>
</tr>
<tr>
<td>12</td>
<td>Dec 5</td>
<td>Review</td>
<td>Assignment 2 due</td>
<td></td>
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Fall 2022

Assessments

Weekly responses to readings

Due Mondays 1pm (Eastern Time): 4%

Complete the following tasks for each of the weekly readings:

1. Explain how the text triggers your imagination and relates to your personal experience.
2. Explain how you reacted to this text. Consider what thoughts, emotions, memories and moods the text provoked.
3. Cite a quote that you like from the text and explain why it is significant to you.
4. Summarize the reading in 100 words or less. Explain to what extent your summary captures the entire meaning, tone, and style of the text.

Your responses to each of the tasks should be 1 paragraph maximum. If there is more than one reading for a particular week, keep your responses to each reading separate (i.e., do all tasks for the first reading and then repeat for the second reading).

Please format your response as follows:

• Maximum 4 pages double spaced font size 12 (no title page)

Assignment 1: Information extraction from Rachel Carson’s book Silent Spring

Due October 24, 11:59 pm (Eastern Time): 20%

Summarize the information presented in Rachel Carson’ book Silent Spring. Organize your information by using the following guidelines:

• Organize your information using headings for different topics addressed in the book.
• Summarize the main information for each topic, including scientific evidence and any environmental decision-making processes and outcomes relevant to the topic, as well as the author’s sources of information.
• Summarize the author's critique of environmental policies and decision-making practices.

Please format your assignment as follows:

• Maximum 12 pages double spaced font size 12 (no title page, excluding references cited)
• Cite references in a consistent format
Assignment 2: Aesthetic reading of Rachel Carson’s *Silent Spring*

Due December 5, 11:59 pm (Eastern Time): 20%

Write about your personal experience reading *Silent Spring*. Address the following questions and tasks in your paper:

- How did you react to this book? Explain what thoughts, memories, emotions and moods it provoked in you.
- What parts of the book were most meaningful to you and why?
- How did your experience reading this book compare to reading a scientific article?
- How did the style of the book affect your response to the main arguments of the author?
- To what extent is the book seeking to give you information and/or inviting you to use your imagination and experience to understand its meaning? Provide examples from the text to illustrate your perspective.
- Summarize the main argument of the book in 250 words or less. To what extent does your summary capture the tone, style and meaning of the text? Does it matter if your summary does not provoke the same reaction as the original text? Explain why.

Please format your assignment as follows:

- Maximum 12 pages double spaced font size 12 (no title page, excluding references cited)
- Cite references in a consistent format

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Final exam: Dear future environmentalists, you should read Rachel Carson’s book *Silent Spring* because…

Worth 20%

Write a compelling letter to the next generation of environmentalists (imagine it will held in a time capsule that will be opened by environmental studies students 25 years from now) to convince them to read Rachel Carson’s book *Silent Spring*. In your letter explain the enduring impact of this book on the environmental movement. Use images, metaphors, stories or poetry to help future environmentalists to understand and imagine what the experience of reading this book feels like. Explain the qualities of the book in terms of a scientific, ethical and literary (aesthetic and writing style) perspective. You should also explain why the book *Silent Spring* is as relevant for environmental decision-making today as it was when it was published and why you think it is likely to be relevant in the future. To help you think about what to write in your letter, you may consult the following resources and any other sources you find. However, since this is a letter, you do not cite sources. Your letter will be graded based on the quality of your description, explanation and argument as well as how compelling it is to read (are future environmentalist likely to read the book after reading your letter?).